

## CLAIMS

1. A method for configuring a schedule process, comprising:  
scheduling an order into a shift of a worker according to a set of rules; and  
configuring the set of rules to change the act of scheduling.
2. The method of claim 1 wherein configuring comprises programming a rule to control which orders are considered in the schedule process.
3. The method of claim 1 wherein configuring comprises programming a rule to control which workers are considered in the schedule process.
4. The method of claim 1 wherein configuring comprises programming a rule to control whether an order can be assigned to a worker.
5. The method of claim 1 wherein configuring comprises programming a rule to provide a score when comparing a workers to an order.
6. The method of claim 1, further comprising programming a set of constants to control the flow of execution within the rules, the constants replacing global constants that would otherwise require explicit reference in the configured set of rules.
7. The method of claim 1 wherein scheduling comprises negotiating a reservation, assigning the reservation, and optimizing the reservation.
8. A method for configuring a schedule process, comprising:  
scheduling an order into a shift of a worker according to a set of rules; and  
programming a constraint set to change the act of scheduling.

9. The method of claim 8, wherein programming a constraint set includes programming a set of rules, each rule programmed in accordance with a rule language convention having:

a first field containing rule identifier to uniquely identify the data structure; and

a field containing a rule body including material for altering the schedule process from a standard process to a reconfigured process.

10. The method of claim 8 wherein scheduling comprises negotiating a reservation, assigning the reservation, and optimizing the reservation.

11. A method for performing a schedule process, comprising:

programming a programmed constraint set to supplement or change a fixed constraint set; and

executing a scheduling process that performs a process of scheduling orders to a worker in accordance with the programmed constraint set and the fixed constraint set.

12. The method of claim 11 wherein the programmed constraint set comprises programmable rules and constants.

13. The method of claim 12, further comprising translating the first set of rules from a defined configurable rule language convention into a predefined grammar.

14. The method of claim 13 wherein translating the first set of rules comprises compiling the first set of rules into a library that is used when the schedule process is performed.

15. The method of claim 12 wherein executing the scheduling process comprises performing the scheduling process according to a standard process except where the

programmed first set of rules have altered performance of the scheduling process to a reconfigured process.

16. A scheduling system for a scheduling environment, comprising:

a negotiator to negotiate the reservation of orders; and

an assigner to assign the orders to workers,

the negotiator and assigner respectively negotiating and assigning the orders according to a constraint set including a fixed set of business rules and a set of programmable configuration rules.

17. The scheduling system of claim 16, further comprising an optimizer to optimize the reservation of orders.

18. The scheduling system of claim 16 wherein the negotiator and assigner are implemented in a computer system having a processor and a memory coupled thereto.

19. The scheduling system of claim 16 wherein the set of configuration rules programmed according to a rule language convention defining a first data field containing data to uniquely identify a respective configuration rule and a second data field containing data representing a rule clause for altering a scheduling process from a standard process to a reconfigured process.

20. A scheduling system, comprising:

a memory for storing a set of rules having a set of fixed business rules and a set of configurable rules programmed by a service organization; and

a processor coupled to the memory for executing a scheduling process that performs a schedule process of scheduling orders and workers in accordance with the set of rules as altered by the set of configurable rules.

21. The scheduling system of claim 20 wherein execution of the scheduling process by the processor includes invoking the set of rules from defined locations in a negotiation algorithm.

22. The scheduling system of claim 20 wherein the processor further executes an assignment algorithm in accordance with the set of rules as altered by the set of configurable rules to assign orders to a worker.

23. The scheduling system of claim 20 wherein the processor further executes an optimization algorithm in accordance with the set of rules as altered by the set of configurable rules to assign orders to a worker.

24. The scheduling system of claim 20 wherein the processor further executes negotiation, assignment, and optimization algorithms in accordance with the set of rules as altered by the set of configurable rules to schedule orders to a worker.

25. The scheduling system of claim 20 wherein the set of configurable rules programmed by the service organization are compiled from a defined rule language convention into libraries and stored in the memory according to a defined rule grammar format.

26. A scheduling system, comprising:

a first algorithm for negotiating the reservation of work orders;

a second algorithm for assigning work orders to workers;

a set of rules that are invoked from defined locations in the first and second algorithms to govern execution of the algorithms, the set of rules including a fixed set of business rules augmented by a set of programmable rules for altering execution of the algorithms from the execution according to only the fixed set of business rules.

27. The scheduling system of claim 26 wherein the first and second algorithms are implemented in a processor and the set of rules are stored in a memory coupled to the processor.

28. A computer-readable medium having stored thereon a data structure, comprising:

a first data field containing data to uniquely identify the data structure; and

a second data field containing data representing a rule body including data for altering a scheduling process from a standard process to a reconfigured process.

29. The computer-readable medium of claim 28 wherein the scheduling process comprises negotiating a reservation, assigning the reservation, and optimizing the reservation.

30. The computer-readable medium of claim 28 wherein the second data field includes a variable label denoting a value that is returned when the data structure is accessed.

31. The computer-readable medium of claim 30 wherein the second data field includes bracket delimiters to identify the variable label.

32. The computer-readable medium of claim 28 wherein the second data field includes an operator and a rule body, the rule body bounded by a pair of braces and the operator operating on the rule body.

33. The computer-readable medium of claim 32 wherein the operation comprises a Boolean operator.

34. The computer-readable medium of claim 32 wherein the operation comprises a set operator.

35. A computer-readable medium having instructions stored thereon for causing a computer to perform a method for performing a schedule process, comprising:  
scheduling an order into a shift of a worker according to a set of rules; and  
configuring the set of rules to change the act of scheduling.

36. The method of claim 35 wherein configuring comprises programming a rule to control which orders are considered in the schedule process.

37. The method of claim 35 wherein configuring comprises programming a rule to control which workers are considered in the schedule process.

38. The method of claim 35 wherein configuring comprises programming a rule to control whether an order can be assigned to a worker.

39. The method of claim 35 wherein configuring comprises programming a rule to provide a score when comparing a workers to an order.

40. The method of claim 35, further comprising programming a set of constants to control the flow of execution within the rules, the constants replacing global constants that would otherwise require explicit reference in the configured set of rules.

41. The method of claim 35 wherein scheduling an order comprises negotiating a reservation, assigning the reservation, and optimizing the reservation.42. A computer-readable medium having instructions stored thereon for causing a computer to perform a method for performing a schedule process, comprising executing a scheduling process that

